

# PATENT COOPERATION TREATY

**PCT**

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
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in its capacity as elected Office

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Priority date:

18 March 1998 (18.03.98)

Applicant:

FENDIS, Gregory

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

18 June 1999 (18.06.99)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer:

J. Zahra

(PCT Article 36 and Rule 70)

REC'D 10 NOV 1999

Applicant's or agent's file reference SHW:AJM:VP:FP10795	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International application No. <b>PCT/AU 99/00171</b>	International filing date ( <i>day/month/year</i> ) 18 March 1999	Priority Date ( <i>day/month/year</i> ) 18 March 1998
International Patent Classification (IPC) or national classification and IPC  <b>Int. Cl.<sup>6</sup> A63B 71/06</b>		
Applicant <b>FENDIS, Gregory</b>		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of 3 sheets, including this cover sheet.  <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of 12 sheet(s).
3.	This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 18 June 1999	Date of completion of the report 4 November 1999
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No. (02) 6285 3929	Authorized Officer  <b>P. CLAYTON-STAMM</b> Telephone No. (02) 6283 2168

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☐ the international application as originally filed.
- ☒ the description, pages 7 to 14, and 21 as originally filed,  
pages , filed with the demand,  
pages 1 to 6, filed with the letter of 11 October 1999.
- ☒ the claims, pages , as originally filed,  
pages , as amended (together with any statement) under Article 19,  
pages , filed with the demand,  
pages 15 to 20, filed with the letter of 11 October 1999.
- ☒ the drawings, pages 1 to 6, as originally filed,  
Pages , filed with the demand,  
pages , filed with the letter of .
- ☐ the sequence listing part of the description:  
pages , as originally filed  
pages , filed with the demand  
pages , filed with the letter of .

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:**

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1.	Statement	Novelty (N)	Claims 1 to 43	YES
			Claims	NO
	Inventive step (IS)	Claims 1 to 43	Claims	YES
			Claims	NO
	Industrial applicability (IA)	Claims 1 to 43	Claims	YES
			Claims	NO

**2. Citations and explanations (Rule 70.7)**

Claims 1 to 43 are novel and are seen to involve an inventive step over the prior art.

DATA COLLECTION SYSTEM

The present invention relates to a system for the collection of data from remote locations, of particular application as a golf scoring system but by no means limited to this use.

Traditionally golfers record their score progressively on a card. Such scores may be recorded after the game of golf for later reference, such as for the calculation of handicaps and so on, by lodging the score card with a golf club or other authority. Such systems are time consuming for the golfer and golf club administrator, insecure, inconvenient if records of a large number of golfers and their score cards are to be accumulated centrally, and incapable of providing prompt and authoritative details to other golfers of correct handicaps or other statistical information.

It is an object of the present invention, therefore, to provide a data collection system that can at least reduce one or more of the above limitations.

Accordingly, the present invention provides a data collection system including:

an electronic central data collection means for accumulating, storing and manipulating data;

a plurality of data input means for entering data remotely; and

communications means for communicating between said data input means and said data collection means, whereby data may be entered by a person into any of said data input means and wherein data so entered is transmitted to said data collection means.

Preferably said system is to transmit further data from said data collection means to one or more of said data input means.

Preferably each of said data input means includes identification means for tagging any data entered into said

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data input means with a data tag.

Preferably said data collection means includes memory means for storing said data associated with said tag.

5            Preferably said tag indicates an identity of a person entering said data.

Preferably each of said data input means includes card reading means for reading a data card.

10           Thus, data may be entered from a card, or by a card as well as by other means.

Preferably said card stores said data tag.

Preferably each of said data input means includes card writing means, for storing data onto a card, whereby said stored data may be data transmitted from said data  
15 collection means.

Thus, after data is entered into the data input means and transmitted to the data collection means, it—or other data, such as data updated on the basis of the entered data—may be transmitted back to the data input  
20 means and stored onto the card.

Preferably said card writing means comprises a smart card writing means.

Preferably said card reading means comprises a smart card reading means.

25           Preferably each of said data input means is operable to associate any data entered into said data input means with a reference read by said smart card reading means from a smart card.

Preferably said reference corresponds to the  
30 identity of a person entering said data and in possession of said smart card.

Preferably said data comprises golf score data.

Thus, data—such as a golf score—may be entered into one of the data input means, but stored centrally.  
35 The data may be identified in the central location according to any desired criterion, but most preferably according to the person who has entered the data. This

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identity may be stored on a smart card, or any other suitable medium, or entered manually by that person.

Preferably each of said data input means includes a data entry terminal including a keyboard or keypad and  
5 visual display unit.

Thus, data may be entered by means of a keyboard or keypad, and a visual display can be provided to convey information to the person, or echo the data being entered.

Preferably each of said data input means includes  
10 a proximity sensing means to detect when a user approaches one of said data input means, so that portions of said system can automatically power up only when required by said user and to identify the location of said user or of said data input means.

15 Thus, this feature will reduce power demands.

Preferably said communication means includes a wireless communication means.

Thus, although communication may be means of cables between the data collection means and the data input  
20 means, where desirable communication can be wireless, with transmitters attached to each data input means (which may be mobile).

The present invention further provides a golf scoring system including:

25 a central score collection computer for accumulating, storing and manipulating golf scores;

a plurality of score input terminals for entering golf scores remotely; and

communications means for communicating between  
30 said terminals and said central computer, whereby said terminals are distributed around a golf course so that players may enter golf scores into said terminals, and said terminals may transmit said scores to said central computer, and said central computer is operable to store  
35 said scores and calculate cumulative scores and handicaps.

Preferably said communications means includes radio communication means so that said terminals and said

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central computer can communicate wirelessly.

Preferably said communication means is a two way communication means so that said central computer can transit data including cumulative scores and/or handicaps to said terminals.

Preferably each of said terminals includes identification means for tagging each of said scores entered into said terminals with a corresponding data identity tag.

Preferably said central computer is operable to store said data identity tags associated with said scores.

Preferably each of said tags indicates an identity of a person entering the corresponding of said scores.

Preferably each of said terminals includes a smart card reader.

Thus, data may be entered from a smart card, or by a smart card as well as by other means.

Preferably each of said terminals includes a smart card writer, for storing data onto a smart card.

Preferably said system includes said smart card.

Preferably said stored data is data transmitted from said central computer, such as cumulative core data or handicap data.

Thus, after a score is entered into one of the terminals and transmitted to the central computer, it - or other data, such as data updated on the basis of the entered data - may be transmitted back to the terminal and stored onto the smart card.

Preferably each of said terminals is operable to associate any data entered into said terminal with a reference read by said smart card reader from said smart card.

Preferably said reference corresponds to the identity of a person entering said a score and in possession of said smart card.

Thus, a golf score may be entered remotely into



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one of the terminals, and stored centrally. The scores may be identified in the central computer according to any desired criterion, but most preferably according to the person who has entered the score. This identity may be  
5 stored on a smart card, or entered manually by that person.

Preferably each of said terminals includes a data entry terminal including a keyboard or keypad and visual display unit.

Preferably each of said terminals includes a  
10 proximity sensor to detect when a player approaches one of said terminals, so that portions of said system can automatically power up only when required by said player and to identify the location of said one of said terminals.

Preferably said central computer is connected to  
15 a computer network so that data stored on said central computer can be accessed remotely and/or said central computer can access golf data stored remotely.

Thus, handicap or score information may be shared with other clubs, or accessed by players from home or  
20 elsewhere.

The present invention still further provides a golf scoring system including:

a golf course with a club house;  
a central score collection computer for  
25 accumulating, storing and manipulating golf scores, located in said club house;

a plurality of score input terminals for distribution around said course for entering golf scores remotely; and

30 wireless communications means for communicating between said terminals and said central computer, whereby golf players may enter their scores progressively into said terminals and said terminals can transmit said scores to said central computer, and said central computer is  
35 operable to store said scores and calculate cumulative scores and handicaps.

The present invention yet further provides a

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method for golf scoring including the steps of:

entering a score remotely into a score input terminal;

5 transmitting said score from said terminal to a central score collection computer for accumulating, storing and manipulating golf scores; and

storing said score on said central computer.

Preferably said method includes calculating a cumulative score by means of said central computer.

10 Preferably said method includes transmitting said cumulative score from said central computer to said input terminal.

Preferably said method includes calculating handicap data by means of said central computer.

15 Preferably said method includes transmitting said handicap data from said central computer to said terminal.

Preferably said method includes distributing a plurality of said input terminals on a golf course.

20 Preferably said method includes progressively entering said score after each hole of said golf course.

Preferably said method includes entering identification data into said input terminal associated with said score and storing said score and data calculated therefrom identified by means of said identification data.

25 Preferably said entering identification data includes reading said identification data from a smart card.

Preferably said method further includes storing said score on said smart card.

30

In order that the invention may be more clearly ascertained, preferred embodiments will now be described by way of example with reference to the accompanying drawings, in which:

35 Figure 1 is a schematic representation of a golf scoring system according to preferred embodiment of the present invention;

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THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A data collection system including:
  - an electronic central data collection means for
  - 5 accumulating, storing and manipulating data;
  - a plurality of data input means for entering data
  - remotely; and
  - communications means for communicating between
  - said data input means and said data collection means,
  - 10 whereby data may be entered by a person into any of said
  - data input means and wherein data so entered is transmitted
  - to said data collection means.
2. A data collection system as claimed in claim 1, wherein
- 15 said system is to transmit further data from said data
- collection means to one or more of said data input means.
3. A data collection system as claimed in either claim 1
- or 2, wherein each of said data input means includes
- 20 identification means for tagging any data entered into said
- data input means with a data tag.
4. A data collection system as claimed in any one of the
- preceding claims, wherein said data collection means
- 25 includes memory means for storing said data associated with
- said tag.
5. A data collection system as claimed in either claim 3
- or 4, wherein said tag indicates an identity of a person
- 30 entering said data.
6. A data collection system as claimed in any one of the
- preceding claims, wherein each of said data input means
- includes card reading means for reading a data card.
- 35
7. A data collection system as claimed in claim 6, wherein
- said card stores said data tag.

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8. A data collection system as claimed in any one of the preceding claims, wherein each of said data input means includes card writing means, for storing data onto a data  
5 card, whereby said stored data may be data transmitted from said data collection means.

9. A data collection system as claimed in claim 8, wherein said card writing means comprises a smart card writing  
10 means.

10. A data collection system as claimed in either claim 6 or 7, wherein said card reading means comprises a smart card reading means.  
15

11. A data collection system as claimed in claim 10, wherein each of said data input means is operable to associate any data entered into said data input means with a reference read by said smart card reading means from a  
20 smart card.

12. A data collection system as claimed in claim 11, wherein said reference corresponds to the identity of a person entering said data and in possession of said smart  
25 card.

13. A data collection system as claimed in any one of the preceding claims, wherein said data comprises golf score data.  
30

14. A data collection system as claimed in any one of the preceding claims, wherein each of said data input means includes a data entry terminal including a keyboard or keypad and visual display unit.  
35

15. A data collection system as claimed in any one of the preceding claims, wherein each of said data input means

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includes a proximity sensing means to detect when a user approaches one of said data input means, so that portions of said system can automatically power up only when required by said user and to identify the location of said user or of said data input means.

16. A data collection system as claimed in any one of the preceding claims, wherein said communication means includes a wireless communication means.

17. A golf scoring system including:

a central score collection computer for accumulating, storing and manipulating golf scores;

a plurality of score input terminals for entering golf scores remotely; and

communications means for communicating between said terminals and said central computer, whereby said terminals are distributed around a golf course so that players may enter golf scores into said terminals, and said terminals may transmit said scores to said central computer, and said central computer is operable to store said scores and calculate cumulative scores and handicaps.

18. A golf scoring system as claimed in claim 17, wherein said communications means includes radio communication means so that said terminals and said central computer can communicate wirelessly.

19. A golf scoring system as claimed in either claim 17 or 18, wherein said communication means is a two way communication means so that said central computer can transit data including cumulative scores and/or handicaps to said terminals.

20. A golf scoring system as claimed in any one of claims 17 to 19, wherein each of said terminals includes identification means for tagging each of said scores

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entered into said terminals with a corresponding data identity tag.

21. A golf scoring system as claimed in claim 20, wherein  
5 said central computer is operable to store said data identity tags associated with said scores.

22. A golf scoring system as claimed in either claim 20 or  
10 21, wherein each of said tags indicates an identity of a person entering the corresponding of said scores.

23. A golf scoring system as claimed in any one of claims  
15 17 to 22, wherein each of said terminals includes a smart card reader, for reading data from a smart card.

24. A golf scoring system as claimed in any one of claims  
17 to 23, wherein each of said terminals includes a smart card writer, for storing data onto a smart card.

20 25. A golf scoring system as claimed in claim 24, wherein said stored data is data transmitted from said central computer, such as cumulative core data or handicap data.

25 26. A golf scoring system as claimed in either claim 24 or 25, wherein said system includes said smart card.

27. A golf scoring system as claimed in claim 23, wherein  
30 each of said terminals is operable to associate any data entered into said terminal with a reference read by said smart card reader from said smart card.

28. A golf scoring system as claimed in claim 27, wherein  
35 said reference corresponds to the identity of a person entering said a score and in possession of said smart card.

29. A golf scoring system as claimed in any one of claims  
17 to 28, wherein said central computer is connected to a

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computer network so that data stored on said central computer can be accessed remotely and/or said central computer can access golf data stored remotely.

5 30. A golf scoring system including:

a golf course with a club house;

a central score collection computer for accumulating, storing and manipulating golf scores, located in said club house;

10 a plurality of score input terminals for distribution around said course for entering golf scores remotely; and

wireless communications means for communicating between said terminals and said central computer, whereby  
15 golf players may enter their scores progressively into said terminals and said terminals can transmit said scores to said central computer, and said central computer is operable to store said scores and calculate cumulative scores and handicaps.

20

31. A method for golf scoring including the steps of:

entering a score remotely into a score input terminal;

25 transmitting said score from said terminal to a central score collection computer for accumulating, storing and manipulating golf scores; and

storing said score on said central computer.

30 32. A method for golf scoring as claimed in claim 31, including calculating a cumulative score by means of said central computer.

35 33. A method for golf scoring as claimed in claim 32, including transmitting said cumulative score from said central computer to said input terminal.

34. A method for golf scoring as claimed in any one of

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claims 31 to 33, including calculating handicap data by means of said central computer.

5 35. A method for golf scoring as claimed in claim 34, including transmitting said handicap data from said central computer to said terminal.

10 36. A method for golf scoring as claimed in any one of claims 31 to 35, including distributing a plurality of said input terminals on a golf course.

15 37. A method for golf scoring as claimed in claim 36, including progressively entering said score after each hole of said golf course.

20 38. A method for golf scoring as claimed in any one of claims 31 to 37, including entering identification data into said input terminal associated with said score and storing said score and data calculated therefrom identified by means of said identification data.

25 39. A method for golf scoring as claimed in claim 38, wherein said entering identification data includes reading said identification data from a smart card.

40. A method for golf scoring as claimed in claim 39, including storing said score on said smart card.